

Patent Claims

1. A component (1), in particular composite component for a support of a vehicle, comprising a basic body (2) with integrated air-conditioning system modules (K1 to K6), the basic body (2) extending in the transverse direction (Y direction) and in at least one further direction (X direction, Z direction).
5
- 10 2. The component as claimed in claim 1, the basic body (2) extending at least partly in the longitudinal direction (X direction) of the vehicle.
- 15 3. The component as claimed in claim 1 or 2, the basic body (2) extending at least partly in the vertical direction (Z direction) of the vehicle.
- 20 4. The component as claimed in one of claims 1 to 3, the basic body (2) extending in the direction of the foot region (I) and/or the rear part region (VII).
- 25 5. The component as claimed in one of claims 1 to 4, the basic body (2) being formed from at least two parts, in particular two half-shells (2a, 2b), which form cavities.
30
6. The component as claimed in claim 5, the two parts (2a, 2b) being interconnected positively and non-positively in the YZ plane or in the YX plane.
- 35 7. The component as claimed in one of claims 1 to 6, the basic body (2) forming a bearing basic hollow structure which has a T shape.
8. The component as claimed in claim 7, the basic body having further branching structures.

9. The component as claimed in one of claims 1 to 8, an air guide duct (K3) which is formed by at least one of the cavities of the basic body (2) being integrated as an air-conditioning system module (K1 to K4).

5

10. The component as claimed in claim 9, the air guide duct (K3) extending from a central region of the basic body (2) toward at least one side (V, VI), toward the floor (I) and/or toward the windshield (III) and being provided with a number of flow openings (4.2) for inlet and/or outlet of air.

11. The component as claimed in one of claims 1 to 10, an air mixer (LM) which is formed in one of the 15 cavities of the basic body (2), in particular in the central region of the basic body (2) and/or at flow exit openings (4.2) of the basic body (2), being integrated as a further air-conditioning system module (K5).

20

12. The component as claimed in one of claims 1 to 11, an air distributor (LV) which is formed by one of the cavities of the basic body (2), in particular in the central region of the basic body (2), being integrated 25 as a further air-conditioning system module (K6).

13. The component as claimed in claim 11 or 12, the air-conditioning system modules (K1 to K6) serving for conditioning the air forming a thermomodule (2.2) of 30 the basic body (2).

14. The component as claimed in one of claims 1 to 13, at least one air-conducting element (6) for controlling the flow rate and for air distribution being integrated 35 in the basic body (2).

15. The component as claimed in claim 14, the air-conducting element (6) being designed as a nozzle, a

flap, in particular a butterfly flap, a swing flap, a louver or roll band flap or cassette and/or a roller flap.

5 16. The component as claimed in claim 14 or 15, the air-conducting element (6) being provided in the air guide duct (K3) and/or at the beginning or at the end of the air guide duct (K3).

10 17. The component as claimed in one of claims 1 to 16, an air temperature control and air-conditioning unit, in particular an evaporator and a heating unit, being integrated in or attached to one of the cavities of the basic body (2) as an air-conditioning system module
15 (K1, K2).

18. The component as claimed in one of claims 1 to 17, a filter being integrated in or attached to one of the cavities of the basic body (2) as an air-conditioning
20 system module (K7).

19. The component as claimed in one of claims 1 to 18, further functional modules (F1, F2, F5), in particular a head-up display, an information display, a combined
25 instrument, an audio and/or communication unit, a navigation unit and/or an operating and information unit, being integrated in or attached to one of the cavities of the basic body (2).

30 20. The component as claimed in one of claims 1 to 19, the basic body (2) being embodied as a finished part which is at least partly lined with plastic.

35 21. The component as claimed in one of claims 1 to 20, a thermomodule (2.2) having one or more air-conditioning system modules (K1 to K7) in each case being embodied as a finished part which is made at least partly of plastic.

22. The component as claimed in one of claims 1 to 21,
the thermomodule (2.2) consisting of plastic mounting
parts and/or the plastic mounting parts forming as
5 injected or injected-on plastic parts a rigidifying
structure for the basic body (2).

23. Use of a component as claimed in one of claims 1
to 22 as a transverse support for a vehicle.